

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously Presented) A liquid crystal display apparatus comprising:
a liquid crystal display element composed of a liquid crystal layer and having a plurality of pixels arranged in a matrix form, said liquid crystal layer including liquid crystal material having a memory property and exhibiting a cholesteric phase at room temperature; and
a driver for dividing one frame into at least four fields and interlace-scanning the at least four fields,
wherein said driver drives the respective fields composing one frame so that a scanning order of the fields is non-sequential at least once, and
wherein said driver drives scanning lines by means of a driving waveform having a reset period for resetting a state of said liquid crystal material, a selection period for selecting a final display state of said liquid crystal material, and a maintaining period for establishing the state selected during the selection period, so as to suppress generation of a stripe pattern due to black out.
2. (Canceled)
3. (Previously Presented) The liquid crystal display apparatus claimed in claim 1, wherein said driver drives the respective fields so that scanning order thereof is always non-sequential.
4. (Original) The liquid crystal display apparatus claimed in claim 1, wherein said driver successively scans odd-numbered lines of the respective fields and successively scans even-numbered lines.

5. (Previously Presented) A liquid crystal display apparatus comprising:
a liquid crystal display element composed of a liquid crystal layer and having a plurality of pixels arranged in a matrix form, said liquid crystal layer including liquid crystal material having a memory property and exhibiting a cholesteric phase at room temperature; and

a driver for dividing one frame into at least four fields and interlace-scanning the at least four fields,

wherein said driver drives the respective fields composing one frame so that a scanning order of the fields is non-sequential at least once;

wherein said driver drives scanning lines by means of a driving waveform having a reset period for resetting a state of said liquid crystal material, a selection period for selecting a final display state of said liquid crystal material, and a maintaining period for establishing the state selected during the selection period;

wherein said driver scans the scanning lines according to the following equation,

$$S = a + nk$$

wherein S is scanning lines to be driven on the respective fields in the plural continued scanning lines divided into plural groups according to a number of fields;

a is variable number, an initial value of which is one, and to which one is added each time when S exceeds the number of fields;

n is variable number, an initial value of which is zero, and to which one is added at every time of scanning on one field, and which returns to the initial value every time when S exceeds the number of fields; and

k is an integer of not less than 2.

6. (Original) The liquid crystal display apparatus claimed in claim 1, wherein said liquid crystal display element is constituted so that a plurality of liquid crystal layers are laminated, and the liquid crystal layers are scanned by said driver.

7. (Canceled)

8. (Canceled)

9. (Original) The liquid crystal display apparatus claimed in claim 1, wherein the scanning of next field is started based on reset period end timing of one scanning line of the previous field.

10. (Previously Presented) A liquid crystal display apparatus, comprising:
a liquid crystal display element composed of a liquid crystal layer and having a plurality of pixels arranged in a matrix pattern, said liquid crystal layer including liquid crystal material having a memory property and exhibiting a cholesteric phase at room temperature; and

a driver for dividing one frame into a plurality of fields and interlace-scanning the plurality of fields,

wherein said driver drives scanning lines by means of a driving waveform having a field scanning period, said field scanning period comprising, in order, a reset period for resetting a state of liquid crystal material, a selection period for selecting a final display state of the liquid crystal material, and a maintaining period for establishing the state selected at the selection period, said driver configured to start scanning of a next field based on an end timing of a reset period of a previous field, so as to suppress generation of a stripe pattern due to black out.

11. (Original) The liquid crystal display apparatus claimed in claim 10, wherein said liquid crystal display element is constituted so that a plurality of liquid crystal layers are laminated, and the liquid crystal layers are scanned by said driver.

12. (Canceled)

13. (Canceled)

14. (Currently Amended) [[A]] The liquid crystal display apparatus claimed in claim 1 further comprising:

~~a liquid crystal display element composed of a liquid crystal layer and having a plurality of pixels arranged in a matrix form, said liquid crystal layer including liquid crystal material having a memory property and exhibiting a cholesteric phase at room temperature;~~

~~an optical absorption layer arranged behind said liquid crystal layer, and layer,
a driver for dividing one frame into at least four fields and interlace scanning the at least four fields,~~

~~wherein said driver drives the respective fields comprising one frame so that a scanning order of the fields is non-sequential at least once,~~

~~wherein said driver drives scanning lines by means of a driving waveform having a reset period for resetting a state of liquid crystals, a selection period for selecting a final display state of the liquid crystals, and a maintaining period for establishing the state selected at the selection period, and~~

~~wherein said liquid crystal layer exhibits a transparent state unless the maintaining period terminates.~~

15. (Previously Presented) The liquid crystal display apparatus claimed in claim 1, wherein said driver applies a voltage having an absolute value greater than 0 volts on said liquid crystal layer during said maintaining period.

16. (Canceled)

17. (Previously Presented) A liquid crystal display apparatus comprising:
a liquid crystal display element composed of a liquid crystal layer and having a plurality of pixels arranged in a matrix form, said liquid crystal layer including liquid crystal material having a memory property and exhibiting a cholesteric phase at room temperature; and
a driver for dividing one frame into at least four fields and interlace-scanning the at least four fields,

wherein said driver drives the respective fields composing one frame so that a scanning order of the fields is non-sequential at least once, so as to suppress generation of a stripe pattern due to black out.

18. (Previously Presented) The liquid crystal display apparatus claimed in claim 17, wherein said driver successively scans odd-numbered lines of the respective fields and then successively scans even-numbered lines.

19. (Previously Presented) The liquid crystal display apparatus claimed in claim 17,

wherein said driver scans scanning lines according to the following equation:

$$S = a + nk,$$

wherein S is a scanning line to be driven on the respective fields in the plural continued scanning lines divided into plural groups according to a number of fields;

a is a variable number, an initial value of which is one, and to which one is added each time when S exceeds the number of fields;

n is a variable number, an initial value of which is zero, and to which one is added at every time of scanning on one field, and which returns to the initial value every time when S exceeds the number of fields; and

k is an integer of not less than 2.

20. (Previously Presented) The liquid crystal display apparatus claimed in claim 17,

wherein said driver drives scanning lines by means of a driving waveform including at least a selection period for selecting a final display state of said liquid crystal material and a maintaining period for maintaining the state selected during the selection period.